



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/601,353

06/23/2003

Khachatur Papanyan

DC-05118

1252

33438

7590

06/16/2006

HAMILTON & TERRILE, LLP

P.O. BOX 203518

AUSTIN, TX 78720

EXAMINER

GORTAYO, DANGELINO N

ART UNIT

PAPER NUMBER

2168

DATE MAILED: 06/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/601,353

Applicant(s)

PAPANYAN ET AL.

Examiner

Dangelino N. Gortayo

Art Unit

2168

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,4-6,8,11-15 and 18-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4-6,8,11-15 and 18-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 6/23/03 and 3/24/2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Amendment***

1. Applicants' filed arguments on 3/24/06. Claims 1, 4-6, 8, 11-14, 15, and 18-21 are presented for examinations.
2. Claims 1, 4-5, 8, 11-13, 15, and 18-20 have been amended. Claims 2-3, 9-10, and 16-17 have been cancelled. Claims 1, 4-6, 8, 11-14, 15, and 18-21 are pending for examination.

### ***Response to Arguments***

3. Applicant's arguments with respect to independent claims 1, 8, and 15 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 recites the limitation "said web" in line 8. There is

insufficient antecedent basis for this limitation in the claim. For purposes of examination, the examiner assumes the limitation is directed to a web server.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1, 4-6, 8, 11-14, 15, and 18-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Zhu ("Zhu" US Patent 6,990,526; filed 5/22/2001, claims priority from Provisional Application 60/205/913 filed 5/22/2000)

As per claim 1, Zhu teaches "A method for delivering a web page to a client, comprising:" (see Abstract)

"receiving a request from a client for a web page;" (column 4 lines 19-24, wherein a client sends a request for a web page accepted by a cache module)

"generating a query from a web server to a database server," (column 3 line 60 – column 4 line 7, wherein a client gateway consisting of a cache module send a query to a data gateway consisting of a management module) "said database server comprising a plurality of data tables and a web page cache tables;" (Figure 2A references 218, 214

and column 5 lines 37-48, wherein a management module maintains a log table and a signature table used for updating cache data)

“examining a flag in a data field in said web page cache table corresponding to said requested web page to determine if the most current version of said requested web page is stored on said web;” (figure 4 and column 6 line 62 – column 7 line 12, wherein the signature table in a data gateway is examined using a status bit to see if a page is current or stale)

“and returning the most current version of the web page to the client.” (column 4 lines 24-27, wherein the cache module in the client gateway returns a current web page to a client)

As per claim 4, Zhu teaches “returning the version of said web page stored on said web server to the client if the examination of said flag in said data field indicates that the version of the web page stored on said web server is the most current version of said requested web page.” (column 6 lines 1-5, wherein a page is provided to the client from cache if it is current and not stale)

As per claim 5, Zhu teaches “generating an updated version of said requested web page if the examination of said flag in said data field indicates that the version of the web page stored on said web server is not the most current version of said requested web page;” (column 4 lines 27-37, wherein a request for an updated copy of the web page is made when an update message is received if the page is indicated to be stale) “and returning said updated version of said requested web page to said client.”

(column 4 lines 19-27, wherein an updated page from the cache module is sent to the client)

As per claim 6, Zhu teaches “caching said updated version of said requested web page.” (column 7 lines 33-39, wherein the updated web page is received and stored in cache memory)

As per claim 7, Zhu teaches “A system for delivering a web page to a client, comprising:” (see Abstract)

“a web server having a plurality of cached web pages stored therein, said web server being operable to receive a request from a client for a web page and to communicate with said database server to determine if a current version of said requested web page is within said plurality of cached web pages stored in said web server,” (column 3 line 60 – column 4 line 7, wherein a client gateway consisting of a cache module receives a page request from a client and sends a query to a data gateway consisting of a management module) said web server further being operable to transmit said requested web page to said client upon an affirmative determination that the corresponding web page stored on said web server is the current version of said requested web page;” (column 4 lines 19-27, wherein an updated page from the cache module is sent to the client)

“a database server comprising a plurality of data tables and a web page cache table,” (Figure 2A references 218, 214 and column 5 lines 37-48, wherein a management module maintains a log table and a signature table used for updating

Art Unit: 2168

cache data) "said database server being operable to examine a flag in a data field in said web page cache table corresponding to said requested web page to determine if the most current version of said requested web page is stored on said web server." (figure 4 and column 6 line 62 – column 7 line 12, wherein the signature table in a data gateway is examined using a status bit to see if a page is current or stale)

As per claim 11, Zhu teaches "said database server is operable to detect the execution of a database trigger and, in response to detection of execution of said database trigger, is further operable to set said flag to a value indicating that the version of the web page stored on said web server is not the most current version of said requested web page." (column 3 lines 36-48, wherein the coherency management module in the data gateway sets a stale bit for an associated web page indicating it is not the most current version available)

As per claim 12, Zhu teaches "said web server is operable to transmit the version of said web page stored on said web server to the client if the examination of said flag in said data field indicates that the version of the web page stored on said web server is the most current version of said requested web page." (column 6 lines 1-5, wherein a page is provided to the client from cache if it is current and not stale)

As per claim 13, Zhu teaches "generate an updated version of said requested web page if the examination of said flag in said data field indicates that the version of the web page stored on said web server is not the most current version of said requested web page;" (column 4 lines 27-37, wherein a request for an updated copy of the web page is made when an update message is received if the page is indicated to

be stale) "and transmit said updated version of said requested web page to said client."  
(column 4 lines 19-27, wherein an updated page from the cache module is sent to the client)

As per claim 14, Zhu teaches "said database server is operable to update said web page cache table to set said flag to a value indicating that the version of the requested web page stored on said web server is the most current version of said requested web page." (column 7 lines 7-12, wherein the status bit is updated to indicate "current" in the signature cache table)

As per claim 15, Zhu teaches "An information handling system comprising a system for delivering a web page to a client, comprising:" (see Abstract)

"a plurality of data processing components operable to process data corresponding to a web page" (Figure 1 references 110, 120, 140, 160, 130, 132, 150, 152, 170, 172 and Figure 2A)

"wherein said information handling system is operable to communicate with:"  
(see Abstract)

"a web server having a plurality of cached web pages stored therein, said web server being operable to receive a request from a client for a web page and to communicate with said database server to determine if a current version of said requested web page is within said plurality of cached web pages stored in said web server," (column 3 line 60 – column 4 line 7, wherein a client gateway consisting of a cache module receives a page request from a client and sends a query to a data

Art Unit: 2168

gateway consisting of a management module) said web server further being operable to transmit said requested web page to said client upon an affirmative determination that the corresponding web page stored on said web server is the current version of said requested web page;" (column 4 lines 19-27, wherein an updated page from the cache module is sent to the client)

"a database server comprising a plurality of data tables and a web page cache table," (Figure 2A references 218, 214 and column 5 lines 37-48, wherein a management module maintains a log table and a signature table used for updating cache data) "said database server being operable to examine a flag in a data field in said web page cache table corresponding to said requested web page to determine if the most current version of said requested web page is stored on said web server." (figure 4 and column 6 line 62 – column 7 line 12, wherein the signature table in a data gateway is examined using a status bit to see if a page is current or stale)

As per claim 18, Zhu teaches "said database server is operable to detect the execution of a database trigger and, in response to detection of execution of said database trigger, is further operable to set said flag to a value indicating that the version of the web page stored on said web server is not the most current version of said requested web page." (column 3 lines 36-48, wherein the coherency management module in the data gateway sets a stale bit for an associated web page indicating it is not the most current version available)

As per claim 19, Zhu teaches "said web server is operable to transmit the version of said web page stored on said web server to the client if the examination of said flag in

said data field indicates that the version of the web page stored on said web server is the most current version of said requested web page.” (column 6 lines 1-5, wherein a page is provided to the client from cache if it is current and not stale)

As per claim 20, Zhu teaches “generate an updated version of said requested web page if the examination of said flag in said data field indicates that the version of the web page stored on said web server is not the most current version of said requested web page;” (column 4 lines 27-37, wherein a request for an updated copy of the web page is made when an update message is received if the page is indicated to be stale) “and transmit said updated version of said requested web page to said client.” (column 4 lines 19-27, wherein an updated page from the cache module is sent to the client)

As per claim 21, Zhu teaches “said database server is operable to update said web page cache table to set said flag to a value indicating that the version of the requested web page stored on said web server is the most current version of said requested web page.” (column 7 lines 7-12, wherein the status bit is updated to indicate “current” in the signature cache table)

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Wang et al. (US Patent 6,925,485 B1)

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dangelino N. Gortayo whose telephone number is (571)272-7204. The examiner can normally be reached on M-F 7:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim T. Vo can be reached on (571)272-3642. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Dangelino N. Gortayo  
Examiner



Tim T. Vo  
SPE